

## AUTOMATIC SELECTION OF STIMULATION CHAMBER FOR VENTRICULAR RESYNCHRONIZATION THERAPY

### Cross-Reference to Related Application(s)

- KDM  
8/12/05
- 5 This application is a continuation of U.S. Patent Application No. 09/738,407,  
now U.S. Pat. No. 6,622,040,  
filed on December 15, 2000, the specification of which is incorporated herein by  
reference.

### Technical Field

- 10 The present invention relates to medical devices and in particular to a medical  
device for automatically selecting stimulation chamber, or chambers, based on sensed  
cardiac signals.

### Background

- 15 When functioning properly, the human heart maintains its own intrinsic  
rhythm, and is capable of pumping adequate blood throughout the body's circulatory  
system. However, some people have irregular cardiac rhythms, referred to as cardiac  
arrhythmias. Such arrhythmias result in diminished blood circulation. One mode of  
treating cardiac arrhythmias uses drug therapy. Drugs are often effective at restoring  
20 normal heart rhythms. However, drug therapy is not always effective for treating  
arrhythmias of certain patients. For such patients, an alternative mode of treatment is  
needed. One such alternative mode of treatment includes the use of a cardiac rhythm  
management system. Such systems are often implanted in the patient and deliver  
therapy to the heart.
- 25 Cardiac rhythm management systems include, among other things, pacemakers,  
also referred to as pacers. Pacers deliver timed sequences of low energy electrical  
stimuli, called pace pulses, to the heart, such as via an intravascular leadwire or  
catheter (referred to as a "lead") having one or more electrodes disposed in or about